

NEW PLASTIC AID IN MOUNTING
HERBARIUM SPECIMENS

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THE proper mounting of plant specimens on sheets for permanent reference is one of the factors which lead to high costs in herbarium maintenance. In an attempt to shorten the process, plastics have been under investigation for a period of years. The use of plastic as described below has resulted in considerable saving of time and yields a better mount with higher permanence than anything used up to the present in herbarium practice.

Preliminary experiments with plastics as an aid in mounting herbarium specimens were made first with Duco cement. This cement, however, contains cellulose nitrate, a substance subject to disintegration after a period of years. Other plastics, such as ethyl cellulose or cellulose acetate, are considered permanently stable and consequently suitable for herbarium purposes.

Acting on suggestions first made by Dr. G. R. Fessenden, formerly of the U. S. Department of Agriculture, and later by chemists of the National Bureau of Standards and of the Dow Chemical Company, various combinations of ingredients were tested, leading finally to the following formula: Toluene—800 cc.; methanol—200 cc.; ethyl cellulose (Ethocel) standard 7 cps.—250 gr.; plasticized with Dow Resin 276 V-2—75 gr. (The two latter ingredients are available only from the Dow Chemical Company, Midland, Michigan.)

To use the medium for mounting, the specimen is weighted down on the herbarium sheet with any convenient small objects placed at proper intervals to keep the plant flat. The plastic is applied by means of an ordinary, 6 ounce oil-can in a thin band over the part to be fastened, and the specimen then left in place for about 20 minutes to permit evaporation of the solvent and hardening of the plastic.

At present the plastic is substituted for nearly all of the sewing usually involved in the technique of mounting with tape or glue. It is particularly useful for mounting coarser plants such as grasses, sedges, palms and oaks. The results are satisfactory enough to warrant adoption of the method as a standard herbarium practice.

This note is presented in the hope of encouraging further improvement of the method. A special type of container might be designed to dispense the plastic in variable quantities according to the need. Furthermore, technical supervision is required to maintain the various components in a moisture-free condition, otherwise the plastic may become milky instead of transparent upon drying. This fact might render the method impractical for many herbaria, but some commercial house might stock the preparation ready for use were the demand sufficient.

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DALEA ALOPECUROIDES ON PLUM ISLAND, ESSEX COUNTY, MASSACHUSETTS.—On September 3, 1950, while birding on Plum Island in the region known as "Hellcat Swamp," I noticed an unfamiliar legume. Taking the specimen, which grew in sandy soil four miles south of the Plum Island Causeway, I found it was apparently *Dalea alopecuroides*. The identification was confirmed by Dr. L. M. Perry of the Arnold Arboretum, and the plant added to the Essex County herbarium. Gray's Manual, 8th edition, gives the range as "adventive east to New York," but Dr. Stuart Harris kindly informs me that there are two previous stations from the state, one on South Boston flats, the other in the Arboretum, and that the Plum Island plant is the first known outside of metropolitan Boston. Since this area is not much travelled and the thickets sometimes yield species of birds rare or accidental in the state, one may speculate whether the seeds were brought in by their agency.—DOROTHY E. SNYDER, Peabody Museum, Salem.

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